

031D7032 (1920-0027)

Appl. No. 10/828,929
Amdt. dated October 24, 2006
Reply to Office action of June 2, 2006

37. (Currently amended) An apparatus for executing a capillary electrophoresis process comprising:

- a first electrode unit adapted to receive one or more substances for electrophoretic analysis;
- a second electrode unit;
- a plurality of capillaries extending between said first and second electrode units and adapted to conduct said one or more substances therethrough;
- a detection chamber disposed between the first and second electrode units and along said plurality of capillaries to detect one or more characteristics of said one or more substances passing through said plurality of capillaries;
- a temperature control unit disposed between said first electrode unit and said detection chamber along said plurality of capillaries, said temperature control unit being adapted to control the temperature of said one or more substances passing through said plurality of capillaries, said temperature control unit including,
 - a heating unit having first and second surfaces, said first surface of said heating unit being at least partially exposed to a fluid for cooling of said heating unit,
 - a thermally conductive medium disposed proximate the second surface of said heating unit, said plurality of capillaries being disposed in said thermally conductive medium, and
 - one or more temperature sensors disposed to detect the temperature at one or more sites of the temperature control unit;

031D7032 (1920-0027)

Appl. No. 10/828,929
Amdt. dated October 24, 2006
Reply to Office action of June 2, 2006

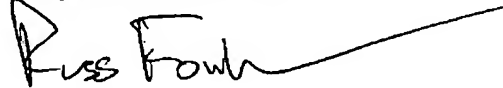
a thermal controller programmed to execute a capillary electrophoresis process in which the energy provided to heat and/or cool the temperature control unit is varied at least in response to said one or more temperature sensors.

63. (New) The apparatus of claim 37 wherein the fluid is a liquid.

64. (New) The apparatus of claim 37 wherein the fluid is a gas.

Based on applicant's telephone conversation with the examiner, it is believed that the amendments and new claims proposed above are allowable. Applicant respectfully requests entry of the above amendments and new claims and allowance of these as well as the remaining claims in the application.

Respectfully submitted,



Russell E. Fowler II
Attorney Registration No. 43,615

Please address correspondence to:

Russell E. Fowler II
Maginot Moore & Beck
Chase Tower
111 Monument Circle, Suite 3250
Indianapolis, Indiana 46204-5115

Telephone: (317) 638-2922
Facsimile: (317) 638-2139
Email: refowler@maginot.com